DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-017093

Address: 333 Burma Road **Date Inspected:** 24-Aug-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No N/A **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG COMPONENT**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Subhasis Bera was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (A,B,C and D-Scan)

This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The member is identified as Splice joint joining between Side plate to Side Plate for segment 9DW to 9EW at crossbeam side. This Inspection was performed after ABF UT Inspectors performed UT of this joint. The result was recorded onto a data sheet according to rejection criteria of "D" Scan procedure that Caltrans QA and ABF QA have jointly filled out on this date.

The Weld Designation is as follows

OBW9C-010

This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The member is identified as Splice joint joining between Side plate to Side Plate for segment 9DW to 9EW at crossbeam side. This Inspection was performed after ABF UT Inspectors performed UT of this joint. The result was recorded onto a data sheet according to rejection criteria of "D" Scan procedure that Caltrans QA and ABF QA have jointly filled out on this

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date. The QA inspector found no rejectable indication at scanned area.

The Weld Designation is as follows

OBW9C-009

This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The member is identified as splice joint joining between edge plate to Edge Plate for segment 9DW to 9EW at Crossbeam Side .This Inspection was performed after ABF UT Inspectors performed UT of this joint. The result was recorded onto a data sheet according to rejection criteria of "D" Scan procedure that Caltrans QA and ABF QA have jointly filled out on this date. The QA inspector found no rejectable indication at scanned area.

The Weld Designation is as follows

OBW9A-010

Ultrasonic Testing (UT) for Suspender Bracket SB80E

This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as suspender bracket SB080E weld joints.

The welds designation reviewed are as follows:

SB020-080-001,004,005,008,011,018,020,031,043,055,067

During the Quality Assurance Ultrasonic Testing (UT) review of welds located on Orthotropic Box Girder (OBG) suspender bracket SB080E weld, this Quality Assurance Inspector (QA) discovered the following issues that One (1) longitudinal linear Class "A" rejectable indication measuring approximately 25mm in length. The indication dbs rating is a +4. Material thickness is 22mm and the depth of the indication is approximately 14.2mm. The weld is identified as SB020-080-007. The joint is CJP "T" joint. The joint connects the Top Plate to Edge plate of the suspender bracket. The indication is clearly marked on or near the weld. The Y distance for this indication is 75 mm from edge of the plate. The suspender bracket SB080E is located at Bay#19. The Notice of Witness Inspection (NWIT) No. is 006474. The indication is located within an area previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform hundred (100%) percent UT inspection of this weld.

The QA Inspector did not generate any incident report on this date.

Visual Inspection after Blast at 11AE

This Quality Assurance (QA) Inspector performed random visual inspection of OBG segment 11AE external side panel, edge panel, deck panel and bottom panel surfaces after grit blasting in between panel point PP95 to PP97.

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Areas that marked for repair were recorded for future repair. Areas requiring additional grinding were marked by QA and repaired by ZPMC personnel.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Bera, Subhasis	Quality Assurance Inspector
Reviewed By:	Patterson, Rodney	QA Reviewer